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EXAMINER

GRAYSAY, TAMARA L

ART UNIT PAPER NUMBER

3623

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/774,538

Applicant(s)

ABRAHAMS ET AL.

Examiner

Tamara L. Graysay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 06 January 2005. These drawings are acceptable.

### ***Specification***

2. The use of trademarks has been noted in this application. The trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Applicant has capitalized the trademarks, however, the trademarks are not accompanied by the generic terminology wherever they appear. Namely, Windows Explorer (three occurrences) is not accompanied by the generic terminology at the paragraph beginning at page 29, line 1.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 10 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

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the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claimed feature of the generic risk record being used “to provide initial values” for the profile risk record is not supported by the original disclosure.

In support of the newly added claim, Applicant directs the examiner’s attention to Fig. 1A, 2, and 5, and the specification page 22, lines 1-7. The examiner notes the following as basis for the rejection under 35 U.S.C. 112, first paragraph.

- a. Figure 1A depicts using existing generic risk records in the profile record. It does not clearly show that the generic risk record is used to provide initial values.
- b. Figure 2 depicts a process, not an apparatus, which includes a first step of creating a profile, then several steps later extracting risks from the knowledge base. Therefore, Figure 2 does not clearly show that the profile element that is created at the first step does not contain initial values that are later extracted from the knowledge base in the fourth step. Further, the new risk record that is created after extracting risks from the knowledge base, is not a clear indication that the new risk record is a new profile risk record or a new generic risk record and it is not a clear representation that the information or data that is extracted is used to provide initial values for the profile risk record, as set forth in claim 10.
- c. Figure 5 does not depict the profile or generic risk record.
- d. Page 22, lines 1-7 read, A “user can extract a risk from the knowledge base and either use these learned values or override the values with values of the user’s own choosing. Typically only some of the risks appropriate to a new profile being created by a user will be extracted by the user from the knowledge base. The user will in addition

create new risks from scratch, as in the next step in the particular use of the invention illustrated in Fig. 2.” This does not support the claimed invention that is limited to an embodiment that is based on circular logic. The embodiment recited in claim 10 requires a risk processor for updating the generic risk record based on the profile risk record in the data store (claim 1) and the risk processor also uses the generic risk record to provide initial values for the profile risk record (claim 10) in the data store. The embodiment claimed is based on circular logic insofar as the risk processor updates a generic record based on a profile record and uses the generic record to provide values for the profile record. If the values from the generic record are provided for the profile record then what is there to update since the values for the profile record are the values from the generic record. Also, the specification does not support the embodiment where the values for the generic record are determined from the profile record when the generic record values are used to provide the profile record values.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claimed invention is limited to an embodiment that is based on circular logic. The embodiment recited in claim 10 requires a risk processor for updating the generic risk record based on the profile risk record in the data store (claim 1) and the risk processor also uses the generic risk record to provide initial values for the profile risk record (claim 10) in the data store. The embodiment claimed is based on circular logic insofar as the risk processor updates a

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generic record based on a profile record and uses the generic record to provide values for the profile record. If the values from the generic record are provided for the profile record then what is there to update since the values for the profile record are the values from the generic record. Also, if the values for the generic record are determined from the profile record then how are the generic record values used to provide the profile record values.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4, 5, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Mulholland (article, Risk assessment in construction schedules).

Regarding claim 1, Mulholland discloses a system for providing an analysis of use in managing risk, the system comprising: a knowledge base, for maintaining a generic risk record including a plurality of different fields at least some of which have values based on experience gained over time (HyperCard knowledge base in Fig.5; previous project experience in Fig.2; historical data discussed at P.11, C.1, L.5); a data store of profiles, for maintaining a profile risk record associated with a particular profile (a particular construction project type) and including the same plurality of fields as the generic risk record, the profile risk record for use in providing a risk assessment in the associated profile (conceptual project schedule in Fig.2; estimate of project duration at

P.11, C.1, L.8-12); a risk processor, for updating the generic risk record based on the profile risk record in the data store of profiles (three recursive steps at P.11, C.1, L.12-17); whereby at least some of the field values of the generic record are refined over time based on values of the corresponding fields of the profile risk record (changes in elements within the knowledge base model discussed at P.12, C.2, last paragraph; transfer project experience and institutional knowledge to new projects discussed at P.14, C.2, L.10-13). The Mulholland profile record (previous project experience) is used to update the records within the knowledge base for a particular project that is being analyzed.

Regarding claim 2, the fields of Mulholland include engineering, procurement, construction, and project management. Mulholland discloses that some of the risk record fields are measuring fields input by the user, and some are calculated fields calculated by the system (the example provided at P.12, C.2, last two lines, the changes in an element [an input risk record field] will not significantly affect the project schedule [a calculated risk record field], for example), and the system allows different modes of analysis in which the fields that are the measuring fields differ (one analysis mode: reexamination of the assumptions and identification of factors driving the construction schedule, and another analysis mode: recognition of hidden assumptions are discussed P.13, C.2, L.4-9).

Regarding claim 4, the Mulholland system is used in different modes of use (three phases, including engineering design, procurement, and site construction, discussed at P.9, C.1, L.47-49), and further wherein only some fields are required to be used in the risk management analysis, the fields that are required depending on the mode of use

(each phase has its own unique set of variables and is differentiated from the other phases by work content discussed at P.9, C.1, L.49-51). The Mulholland system is flexible in that the analysis can be for any combination of the modes (engineering design, procurement, and site construction).

Regarding claim 5, Mulholland discloses both a generic risk record and a profile risk record comprise: a risk component, for indicating a risk, for indicating an inherent risk rating, and also for indicating a residual risk rating (schedule risks discussed at P.11, C.1, L.14 and potential schedule risks at P.11, C.1, L.37-41); a cause component, for indicating cause of the risk (table 3 at P.11 describes some cause components for various risks); a consequence component, for indicating a particular consequence the risk and the inherent and residual of the particular consequence (effects of risks are discussed at P.11, C.1, L.14-15 and modeling of the risks and obtaining the schedule risk profile based on the risks as noted at P.11, C.1, L.16-17); and a control indicating component, for indicating a control, for whether the control is corrective or preventive, and for indicating the effectiveness of the control (the term act or action is used as a control for managing risk; for example, manager acts quickly and decisively at P.14, C.1, L.4-5 and risk management action at P.14, C.1, L.22-23).

Regarding claim 9, Mulholland further comprising a scripting facility for enabling a user to create a script directing how a risk management process be performed, the script indicating steps that can be used in performing risk analysis in any profile (computers are used for assessment of schedule risks and the navigational links within the system can be



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defined by the user as discussed at P.12, under the headings Application of Computers and HyperCard Information System for Risk Identification).

Regarding claim 10, Mulholland includes a risk processor that includes values used in determining risk, as depicted in Tables 4 and 5. Note Fig. 2 whereby the conceptual project risk values are based on values from the knowledge base.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland in view of a prior art admission by applicant(s).

Mulholland discloses choosing a mode of assessment as discussed with respect to claim 2 above; however, Mulholland lacks the particulars of the mode of assessment as recited in claims 3 and 6-8.

Applicant discloses as prior art the use of aggregated calculations in risk assessment (P.24, L.18-19), which are particularly recited in claims 3 and 6-8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mulholland to include aggregated calculations for risk assessment such as those that were "widely used ... and ... not unique" at the time of the invention, such as taught

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by the prior art admission by applicant(s), in order to compute and thus quantify the risk and the consequence associated with the risk.

***Response to Arguments***

7. Applicant's arguments filed 06 January 2005 have been fully considered but they are not persuasive.

a. In general, claims 1-10 have been treated as apparatus claims insofar as the claims do not include proper means-plus-function language and are limited only to the structure that is positively recited therein: a knowledge base, a data store, and a risk processor.

Mulholland also meets the broadly recited functional limitations in that Mulholland includes a knowledge base, a data store, and a risk processor that updates information contained in the knowledge base based on later experiences.

b. Applicant argues that claim 1 is directed to an aspect of the invention in which a profile record, representative of actual experience, is "used to refine" a generic risk record. Claim 1, however, is an apparatus claim, not a method claim. Also, claim 1 is not presented in means-plus-function format, but instead is presented in elements followed by statements of intended use. As such, it is limited only to the elements and positively recited features, nothing more. The elements recited are a knowledge base [for storing risk records having some fields based on experience], a data store of profiles associated with a particular profile, and a risk processor [for updating the generic risk record by refining some generic risk record fields over time based on the profile risk record]. Mulholland alone, or in combination, meets the elements of the apparatus claims

1-10, as discussed in detail above. Applicant's argument that the profile record is used to refine the generic risk record is not an accurate representation of the claimed element: a processor capable of updating the generic record. The apparatus claims do not include a process step of "updating" or "using" the profile record to update the generic record is not included in the scope of the claim, but rather include a statement of intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

c. Applicant argues that the HyperCard knowledge base is not a generic risk record. The knowledge base of Mulholland includes all of the previous projects and is thus a generic record, as broadly recited. Note Tables 4 and 5 that depict generic representations (modeling) of engineering risks, for example, productivity and errors. Mulholland meets the knowledge base as recited in the claims. The generic risk record (nonfunctional descriptive material, i.e., compilation of data) has not been defined structurally to overcome the Mulholland knowledge base.

d. Applicant argues that the Mulholland device does not update the generic risk record. The Mulholland processor updates the records contained in the device insofar as Mulholland stores the data in the knowledge base.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is (703) 305-1918. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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